

Empowering Swim Instructors: Best Practices for Teaching Children with Autism and Related Disorders



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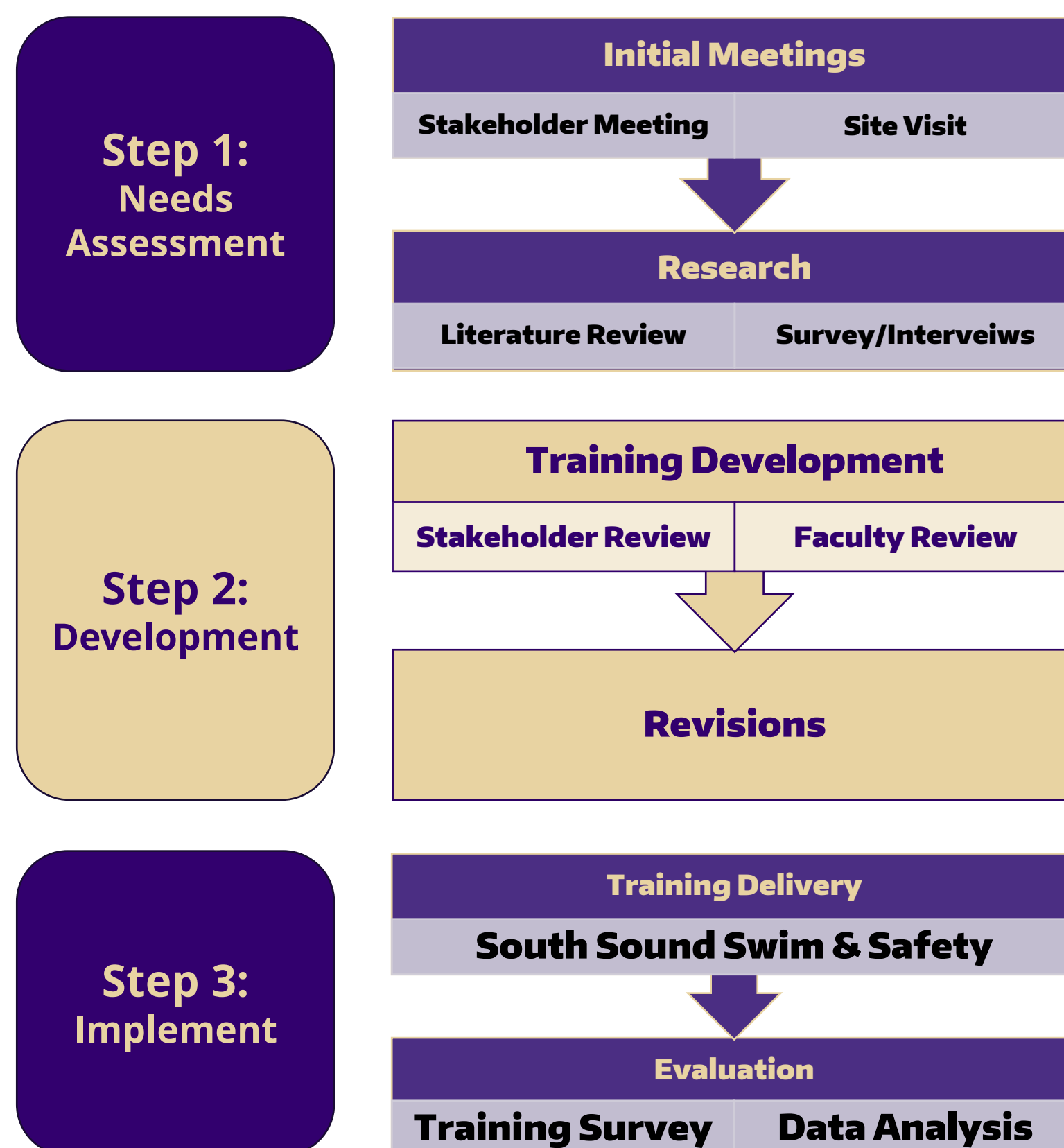
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Background and Purpose

- Swimming is an invaluable skill that promotes physical, mental, cognitive, and social health among children. Beyond the multitude of wellness benefits, it is a critical, life-saving skill.
- Accidental drowning is 160x more likely among children with Autism Spectrum Disorder (ASD) than the general pediatric population¹.
- Adaptive swim lessons provided by aquatic occupational therapists (OT) or trained instructors often have waitlists that extend for months, increased enrollment costs, and/or not available regionally.

Purpose: Develop and deliver an OT-informed training for community swim instructors that will provide them with the tools to successfully teach swim safety and readiness to a children with ASD and related disorders.

Project Process



Needs Assessment

Literature Review

OT-informed best practices for teaching children with ASD^{2,3}:

- “Just Right” challenge
- Clear and concise language
- Positive feedback
- Visual supports
- Modeling (via instructor, peers, or video)
- Breaking down more complex skills
- Most-to-least prompting
- “First...Then...” framework
- Opportunities for choice

Caregiver Survey: Swim & Safety Considerations for Children with ASD

- Motivators:** Affinity for water, organized play, music-to-movement, incorporating child's interests.
- Challenges Reported:** Overstimulating environment, multiple transitions, task demands too high, lack of individualized attention.
- Behaviors in Unsupported Environment:** Impulsivity, inattention, perseveration, wandering/elopement, lack of safety awareness.
- Supports Needed:** Visual aids/schedules, sensory tools (e.g. deep pressure), extra transition time, self-regulation breaks.
- Instructor Requirements:** Understanding of ASD, best practices for supporting neurodiverse learners, rapport-building, frequent communication on child's progress.

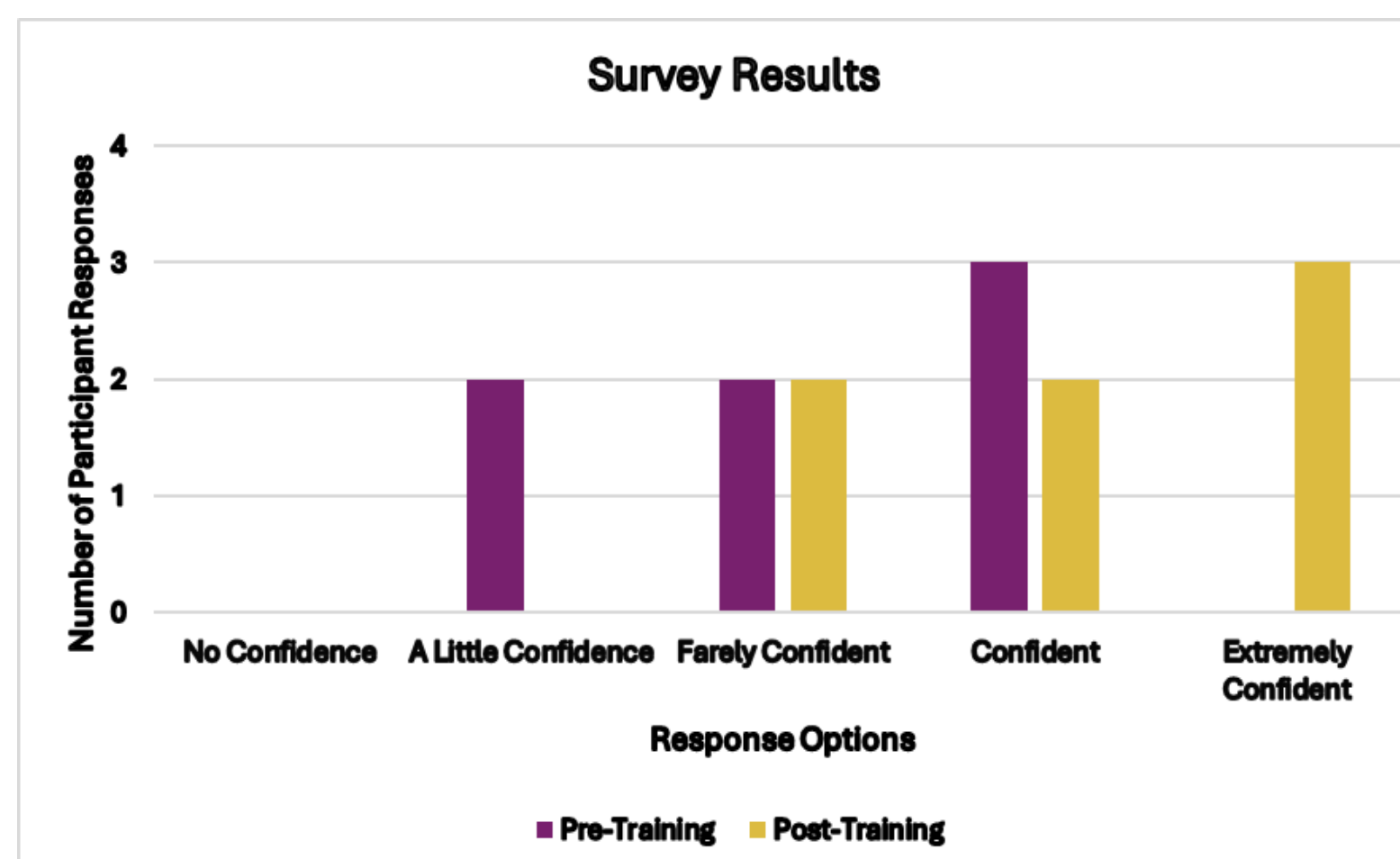
Overview of Training

- Value of inclusive swim & water safety
 - Benefits of swimming for developing physical, emotional, social, cognitive, and leisure skills
 - Reducing rates of accidental drowning
- Characteristics of ASD, Attention-Deficit Hyperactivity Disorder, and Sensory Processing Disorder
- Motivators & challenges for neurodivergent swimmers in the swim environment
- Swim instructor's role
 - Teaching strategies
 - Communication strategies
 - Coping & de-escalation strategies
- Introduction to WOtter Swim Manual © & activities (created by 2017 and 2018 UW MOT student groups)
- Documentation of progress

Results of Training

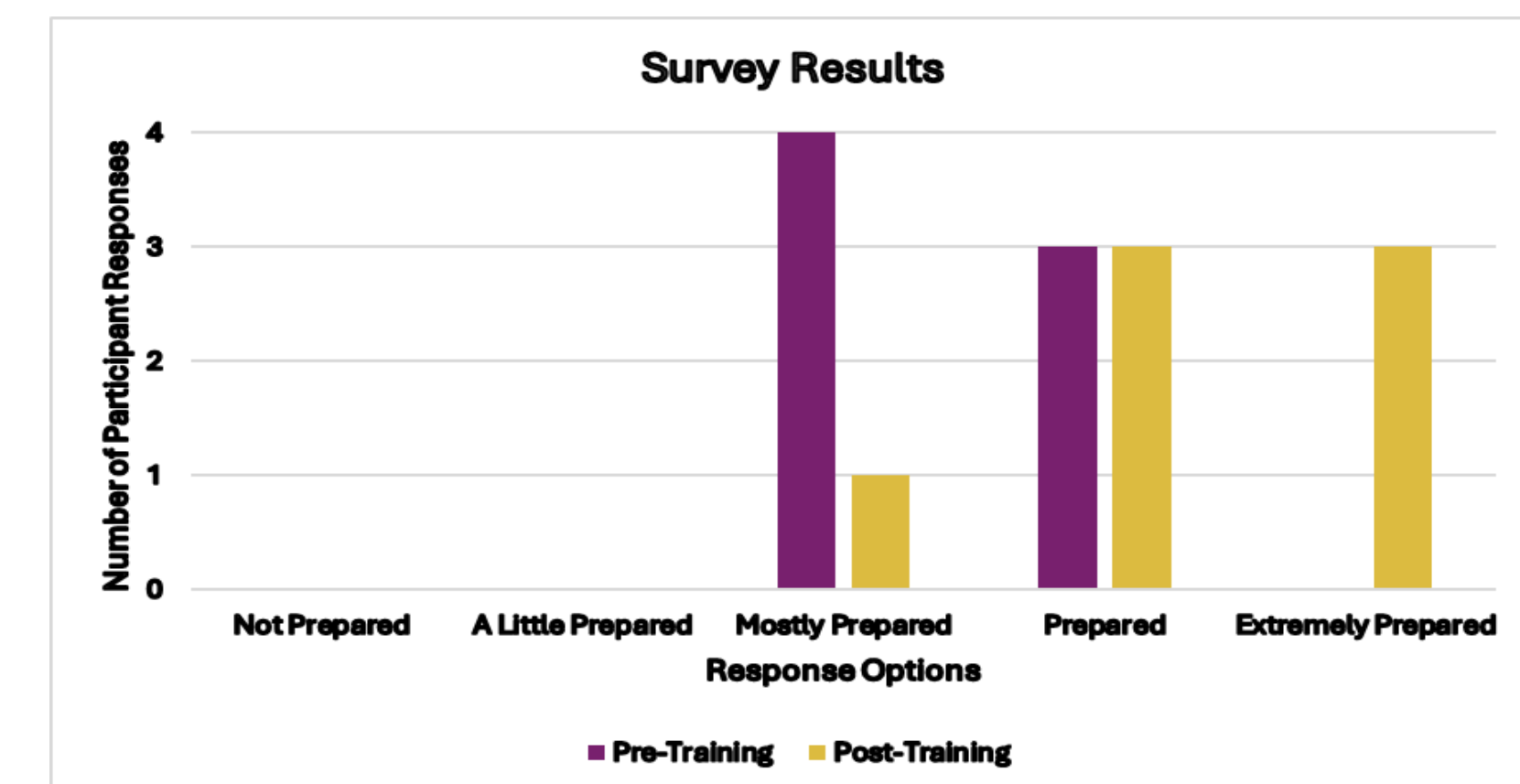
Participant Pre and Post Survey Results

Participants rated their confidence in teaching water safety & swim skills to children with ASD.



Results of Training (cont'd)

Participants rated how prepared they felt to support swimmers with ASD in a pool environment.



Quotes from Staff

- "This presentation helped me with some concerns and questions I had with working with certain kids!"
- "This in-service was very beneficial. It helped my understanding of how to teach kids with different disabilities."
- "The training had a lot of value and has shown me new ways to teach and help kids swim."

Future Directions

- OT and swim manager will continue to facilitate communication between the swim instructors and caregivers.
- Swim instructors to be given information from the training program for continuous learning.
- In-service training will be routinely offered to new employees, provided by OT and swim manager.

References

- ¹Guan, J., & Li, G. (2017). Injury Mortality in Individuals With Autism. *American journal of public health, 107*(5), 791–793. <https://doi.org/10.2105/AJPH.2017.303696>
- ²Kraft, E., Leblanc, R., & Culver, D. M. (2019). Strategies for Teaching Children with Autism Spectrum Disorder in Recreational Aquatics Programs. *Journal of Physical Education, Recreation & Dance, 90*(1), 24–29. <https://doi.org/10.1080/07303084.2018.1535338>
- ³Yanardag, M., Erkan, M., Yilmaz, I., Arican, E., & Düzkantar, A. (2015). Teaching advance movement exploration skills in water to children with autism spectrum disorders. *Research in Autism Spectrum Disorders, 9*, 121–129. <https://doi.org/10.1016/j.rasd.2014.10.016>